REMARKS

Claims 1-38 are pending in the present application. Claim 15 is amended to correct a typographical error. Reconsideration of the claims is respectfully requested.

I. 35 U.S.C. § 102, Anticipation

The Office Action rejects claims 1-38 under 35 U.S.C. § 102 as being anticipated by *Mikami et al.* (US Patent no 5,704,031). This rejection is respectfully traversed.

With respect to claim 1, the Office Action states:

> As per claims 1, 10, 15, 23, 32, 37 and 38, Mikami et al teach a client computer at start up is diagnosing its operating environment (hardware, software, firmware, etc.) by itself and maintaining or repairing as needed. In this process, the client computer checks whether or not the version of the software stored in the client is the latest version per stored copy at the server unit [col. 2, lines 3-10; col. 5, lines 32-35, 46-55; col. 7, lines 32-35].

Office Action, dated March 11, 2003. Applicant agrees with this characterization of *Mikami*. The reference teaches a self-maintenance system **24** in a client unit **2**, wherein the self-maintenance system performs a hardware diagnosis process **S2**, a system start diagnosis process **S5**, an installation state diagnosis process **S7**, and an operating environment update diagnosis process **S10**. The self-maintenance system performs these processes responsive to the power supply being turned on **S1**. Only after the self maintenance system performs these processes does the client start the system **S17**. See **Figs. 1** and **2**.

In contradistinction, the present invention initiates a boot sequence using a current boot code and searches for an updated boot code in response to initiating the boot sequence. Claim 1 recites:

> 1. A method for updating a current boot code in a data processing system in which the current boot code is used to load an operating system, the method comprising the data processing system implemented steps of:
>
> loading a current boot code from a non-volatile memory;
>
> **initiating a boot sequence using the current boot code;**
>
> **searching a storage device for an updated boot code** for the operating system **in response to initiating the boot sequence**; and

> updating the current boot code in the non-volatile memory prior to loading the operating system for the data processing system if the updated boot code is present. [emphasis added]

Mikami does not teach or suggest loading a current boot code and searching a storage device for an updated boot code in response to initiating the boot sequence, as recited in claim 1. The client of *Mikami* repairs itself; however, the boot code of *Mikami* is repaired by a separate self-maintenance system that runs before the boot sequence is initiated. In other words, *Mikami* does not teach a process of **updating** boot code **after** the boot code is loaded.

The applied reference fails to teach or suggest each and every claim limitation. Therefore, *Mikami* does not anticipate claim 1. Independent claims 23 and 37 recite subject matter addressed above with respect to claim 1 and are allowable for the same reasons. Since claims 2-9 and 24-31 depend from claims 1 and 23, the same distinctions between *Mikami* and the invention recited in claims 1 and 23 apply for these claims. Additionally, claims 2-9 and 24-31 recite other additional combinations of features not suggested by the reference. Consequently, it is respectfully urged that the rejection of claims 1-9, 23-31, and 37 is overcome.

Claim 10 recites:

> 10. A method in a data processing system for loading an operating system using a boot code, the method comprising:
> loading a current boot code;
> **searching, by the current boot code, for an updated boot code** prior to loading the operating system;
> **determining, by the current boot code, whether the updated boot code is a later version** of the current boot code; and
> updating the current boot code using the updated boot code responsive to the updated boot code being a later version of the current boot code. [emphasis added]

Mikami does not teach or suggest a boot code that performs the steps of searching for an updated boot code and determining whether the updated boot code is a later version, as recited in claim 10. Again, *Mikami* teaches a separate self-maintenance system that performs hardware, firmware, and software repairs immediately after the power supply is turned on, but before system start up. Thus, *Mikami* fails to teach or suggest a boot code that updates itself, as in claim 10.

The applied reference fails to teach or suggest each and every claim limitation. Therefore, *Mikami* does not anticipate claim 10. Independent claims 32 and 38 recite subject matter addressed above with respect to claim 10 and are allowable for the same reasons. Since claims 11-14 and 33-36 depend from claims 10 and 32, the same distinctions between *Mikami* and the invention recited in claims 10 and 32 apply for these claims. Additionally, claims 11-14 and 33-36 recite other additional combinations of features not suggested by the reference. Consequently, it is respectfully urged that the rejection of claims 10-14, 32-36, and 38 is overcome.

In addition, claim 15 recites:

> 15. A data processing system comprising:
> a bus;
> a first storage device connected to the bus, wherein the first storage device includes current boot code instructions;
> a second storage device connected to the bus, wherein an operating system is located on the second storage device; and
> a processor unit connected to the bus, wherein the processor unit executes the current boot code instructions to determine whether updated boot code instructions are present in the second storage device, updates the current boot code instructions using the updated boot code instructions to form an updated set of boot code instructions if the updated boot code instructions are present on the second storage device, reinitializes the data processing system using the updated set of boot code instructions if the current boot code instructions are updated, and loads the operating system using the updated set of boot code instructions.

Thus, the data processing system of the present invention recited in claim 15 comprises a processor unit that executes boot code to perform update functions at the data processing system. The processor also reinitializes the data processing system using the updated set of boot code instructions and loads an operating system using the updated set of boot code instructions. This is in contrast to the *Mikami* system that requires a separate self-maintenance system to perform diagnosis and repair functions and repairs firmware and software before system start-up.

The applied prior art fails to teach or suggest each and every claim limitation. Therefore, claim 15 is not anticipated by *Mikami*. Since claims 16-22 depend from claim 15, the same distinctions between *Mikami* and the invention recited in claim 15 apply for these claims. Additionally, claims 16-22 recite other additional combinations of features

not suggested by the reference. Consequently, it is respectfully urged that the rejection of claims 15-22 is overcome.

Therefore, the rejection of claims 1-38 under 35 U.S.C. § 102 is overcome.

Furthermore, *Mikami* does not teach, suggest, or give any incentive to make the needed changes to reach the presently claimed invention. *Mikami* actually teaches away from the presently claimed invention because it teaches a separate self-maintenance system the performs diagnosis and repair processes before system start up, as opposed to a boot code that loads and updates itself, as in the presently claimed invention. Absent the Office Action pointing out some teaching or incentive to implement *Mikami* with a boot code that performs an update function on itself, one of ordinary skill in the art would not be led to modify *Mikami* to reach the present invention when the reference is examined as a whole. Absent some teaching, suggestion, or incentive to modify *Mikami* in this manner, the presently claimed invention can be reached only through an improper use of hindsight using Applicant's disclosure as a template to make the necessary changes to reach the claimed invention.

II. Conclusion

It is respectfully urged that the subject application is patentable over *Mikami* and is now in condition for allowance.

The Examiner is invited to call the undersigned at the below-listed telephone number if in the opinion of the Examiner such a telephone conference would expedite or aid the prosecution and examination of this application.

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Respectfully submitted,

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